

FREEDM® One Unitized, Tight-Buffered Cable, Riser

48 F, 50 µm multimode, extended 10G distance (OM4+)

CORNING

Corning FREEDM® One unitized riser cables are flame-retardant, UV-resistant, indoor/outdoor cables designed for aerial and duct applications with no need for a transition splice when entering the building. Available in fiber counts up to 144 fibers, the tight-buffered construction facilitates easy termination for high-fiber-count applications in the local area network (LAN) and eliminates the need for fan-out kits. The design features TIA-598 color-coded 900 µm buffered fibers for easy identification, consistent stripping and direct termination.

Available in 50 µm, 62.5 µm, single-mode and hybrid versions, the cable design meets ICEA S-104-696 test criteria and is also OFNR and FT-4 listed for riser and general purpose use. The small diameter and bend radius of the cable allow for easy installation in space-constrained areas while the innovative waterblocking technology is ideal for OSP applications. The all-dielectric cable construction requires no grounding or bonding, and the UV-resistant, flame-retardant jacket is rugged, durable and easy to strip. This cable is also available with interlocking armor for special applications requiring additional mechanical durability.

Note: This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables while still providing all of the required environmental protection of an indoor/outdoor cable jacket. Black is the standard jacket color using the part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

Features and Benefits

Waterblocking technology

OSP (outdoor) applications

Small diameter and bend radius

Easy installation in space-constrained areas

Color-coded fibers

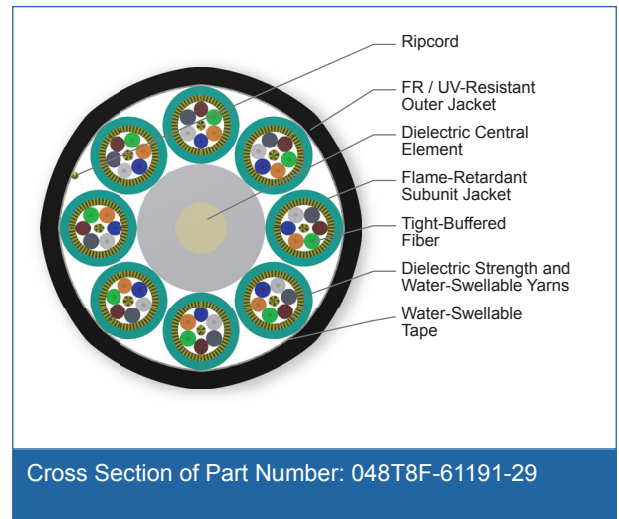
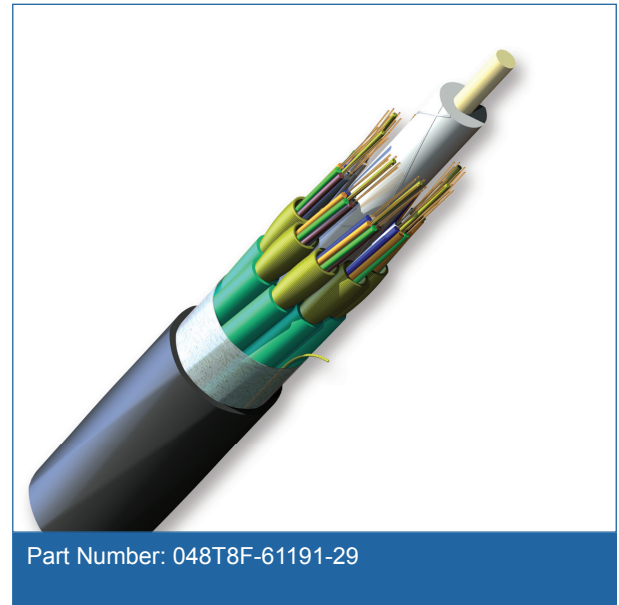
Quick and easy identification

All-dielectric construction

Requires no grounding or bonding

UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip



FREEDM[®] One Unitized, Tight-Buffered Cable, Riser

48 F, 50 µm multimode, extended 10G distance (OM4+)

CORNING

Standards

Listings National Electrical Code[®]
(NEC[®]) OFNR, FT-4

Design and Test Criteria ICEA S-104-696

Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
Application	Direct Buried, Duct, General Purpose Horizontal, Vertical Riser
Cable Type	Tight-Buffered
Product Type	Distribution
Flame Rating	Riser (OFNR)
Fiber Category	50 µm MM (OM4+)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-10 °C to 60 °C (14 °F to 140 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design	
Central Element	Dielectric
Fiber Count	48
Tight Buffer Color	Blue, Orange, Green, Brown, Slate, White
Number of Active Tubes	8
Subunit Color	Aqua
Number of Fibers per Subunit	6
Subunit Diameter	4.40 mm (0.17 in)
Tape	Water-swellable
Number of Ripcords	2
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

FREEDM[®] One Unitized, Tight-Buffered Cable, Riser

48 F, 50 µm multimode, extended 10G distance (OM4+)

CORNING

Mechanical Characteristics Cable

Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	810 N (180 lbf)
Weight	270.5 kg/km (181.8 lb/1000 ft)
Nominal Outer Diameter	18.6 mm (0.73 in)
Min. Bend Radius Installation	279.0 mm (11.0 in)
Min. Bend Radius Operation	186 mm (7.3 in)

Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
------	---

Fiber Specifications

Optical Characteristics (cabled)

Fiber Core Diameter	50 µm
Fiber Category	OM4 Extended Distance
Fiber Code	T
Performance Option Code	91
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1100 m / 600 m
Serial 10 Gigabit Ethernet	600 m / -
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	5350 MHz*km / -

Ordering Information

Part Number	048T8F-61191-29
Product Description	FREEDM [®] One Unitized Tight-Buffered Cable, Riser, 48 F, 50 µm multimode, extended 10 G distance (OM4+)

FREEDM® One Unitized, Tight-Buffered Cable, Riser

48 F, 50 µm multimode, extended 10G distance (OM4+)

The CORNING logo is displayed in white, uppercase letters within a solid blue square.

Notes



Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA

800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks.

All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified.

© 2016 Corning Optical Communications. All rights reserved.